SPECIFICATION

Paragraph 1, line 7, on page 11 should be changed to:

A waveform generator for generating 8-PSK waveforms using 48 times oversampled delta sigma representations is shown in Figure 6 and is indicated generally at 400. The waveform generator 400 includes a logic circuit 402, shift registers 404a, 404b, 404c, 404d, selector 406, look-up table 408, divide by four counter 410, timing unit 412, buffers 414, 416, 418, and 420, resistive networks 422, 424, balanced filters 426,428, and a balanced quadrature modulator 430. Octal symbols (B1, B2, B3) enter logic 402 at the symbol rate Fs. Logic 402 outputs B1, B2, B1' and B2' at rate Fs to registers 404a - 404d. Selector 406 and ~~clock 408~~counter 410, which is driven at 4Fs, select registers 404a, 404b, 404c, and 404d in proper sequence to be output to the address input of look-up table 408. Timing generator 412 generates a timing pulse to one of the buffers 414, 416, 418, or 420 respectively to latch the output of table 408 for each address input. In the exemplary implementation of Figure 6, look-up table 408 outputs all 48 sigma-delta samples per symbol period at a time, which are latched in one of the four 48-bit buffers 414, 416, 418, or 420. When all buffers are full, their 48-bit contents are clocked out serially at the rate 48Fs. It will be appreciated that, in order to be able to load a new 48-bit value while the last 48-bit value is still being clocked out, buffers 414, 416, 418, and 420 should be double-buffers, also known as parallel-to-serial ~~converters~~converters.

Paragraph 2, line 23, beginning on page 11 and continuing on page 12 should be amended as follows:

Buffers 414, 416, 418, and 420 preferably output each bit and its complement in order to generate a balanced, bipolar sigma-delta waveform representation. The outputs of buffers 414, 416, which correspond to bitstreams B2 and B2' and when added in the ratio a:b by proper choice of Za and Zb, generate the I-part of the desired filtered 8-PSK waveform. Likewise buffers 418, 420, which correspond to bitstreams B1 and B1' and when added in the ratio a:b, generate the Q-part of the 8-PSK waveform. These balanced I,Q waveforms contain high-frequency sigma-delta quantizing noise due to the 48-times oversampled sigma-delta representation stored in table 408, which however, is easily removed by simple, balanced low pass filters 426, 428 before quadrature modulation, as described in the '722 patent. ~~Other bus widths~~ Bus widths other than 48 may be used between table 408 and buffers 414, 416, 418, and 420 if more convenient. For example, table 408 can output the 48 bits as six, 8-bit bytes at a rate of 6Fs by supplying another three address bits from a divide-by-6 counter clocked at 24 Fs. By suitable design of a divide-by-24 counter to provide both the two register selection bits and the extra three address bits to table 408, the output bytes can be in the order: